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EXAMINER /

MAHMOUDI, HASSAN

ART UNIT PAPER NUMBER

2175

DATE MAILED: 03/30/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/421,919

Applicant(s)

JERAN, PAUL L.

Examiner

Tony Mahmoudi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


DOV POPOVICI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Remarks

1. In response to communications filed on 31-december-2003, the specification of the disclosure has been amended and new claims 21-35 are added per applicant's request. Therefore, claims 1-35 are presently pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that said subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 7-12, 17-18, 21-24, and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen (U.S. Patent No. 6,356,941 B1) in view of Rose (U.S. Patent No. 6,314,500 B1.)

As to claim 1, Cohen teaches in a computer system including at least one client computer coupled by a communications network (see figure 1) to a secure storage facility (see "protected central storage facility" in Abstract) located remotely to the client computer (see column 2, lines 56-60), a method of accessing a dedicated data storage unit (see Abstract and see column 2, lines 65-67), a data storage unit for storing data files (see column 4, lines 23-

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25) in a secure environment (see Abstract, and see column 13, lines 42-51), the method comprising the following steps:

initiating a request for accessing a dedicated data storage unit (see column 13, lines 36-43), the secure storage facility associated with an address on a communications network (see column 11, lines 46-65);

in response to the request (see column 13, lines 42-51), automatically connecting to the remote secure storage facility at the associated address (see column 4, lines 37-45);

transmitting the request to the remotely located secure storage facility (see column 14, lines 46-65, and see column 15, lines 17-28); and

granting access to the identified dedicated data storage unit (see column 9, lines 32-46.)

Cohen does not teach the data storage unit associated with a user identification code;

the request specifying at least a remotely located secure storage facility containing the dedicated data storage unit and a user identification code; and

identifying the dedicated data storage unit associated with the specified user identification code.

Rose teaches a data processing system (see Abstract), in which he teaches:

the data storage unit associated with a user identification code (see Abstract; see column 5, lines 4-9, and column 8, lines 25-36);

the request specifying at least a remotely located secure storage facility containing the dedicated data storage unit and a user identification code (see Abstract; see column 3, lines 16-18, and column 5, lines 1-4); and

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identifying the dedicated data storage unit associated with the specified user identification code (see column 3, lines 27-46, and see column 3, lines 53-64, and see column 8, lines 37-59.)

Therefore, it would have been obvious to a person having ordinary skill in the art to have modified Cohen to include: the data storage unit associated with a user identification code; the request specifying at least a remotely located secure storage facility containing the dedicated data storage unit and a user identification code; and identifying the dedicated data storage unit associated with the specified user identification code.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cohen by the teachings of Rose, because including the data storage unit associated with a user identification code; the request specifying at least a remotely located secure storage facility containing the dedicated data storage unit and a user identification code; and identifying the dedicated data storage unit associated with the specified user identification code; would enable the system to store and retrieve data to/from specific dedicated portions of secured data storage devices, based on the user identification and the identification of the data source. This inclusion allows selective routing of data to different memory sources in a shared memory system. This permits, for example, data to be routed to only a portion of the memory sources associated with a given requester, thereby reducing the bandwidth to other memory sources and reducing overall latencies within the system, as taught by Rose (see column 3, lines 10-20.)

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As to claim 2, Cohen as modified teaches wherein the step of granting access includes granting access to the identified dedicated storage unit (see Cohen, column 9, lines 1-22) in accordance with pre-existing instructions associated with the specified user identification code (see Rose, column 3, lines 39-47, and see column 8, line 60 through column 9, line 5.)

As to claim 3, Cohen as modified teaches wherein the request further specifies a processor identification code associated with a client computer, the step of identifying the dedicated data storage unit including identifying the dedicated data storage unit associated with both the specified user identification code and the specified processor identification code (see Rose, column 3, lines 39-47; column 4, lines 45-60, and see column 9, lines 29-31.)

As to claim 4, Cohen as modified teaches the method including the further step of displaying to a user a directory of data files stored in the dedicated data storage unit (see Cohen, column 10, lines 49-59.)

As to claim 5, Cohen as modified teaches the method including the further steps of:
selecting a data file from the displayed directory of data files (see Cohen, column 9, line 66 through column 10, line 19, and see column 10, lines 46-52); and
transmitting the selected data file to a client computer associated with the request (see Cohen, column 5, lines 16-18; column 10, lines 52-59, and see column 12, lines 25-38.)

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As to claim 7, Cohen as modified teaches wherein the request further specifies at least one data file stored on the identified dedicated data storage unit (see Cohen, column 3, lines 53-64), the method further comprising the step of transmitting the specified at least one data file to a client computer associated with the request (see Cohen, column 5, lines 16-18; column 10, lines 52-59, and see column 12, lines 25-38.)

As to claims 8 and 9, Cohen as modified teaches each data file stored in the dedicated data storage unit (see Cohen, Abstract) is assigned a reference identification number by the secure storage facility at the time each data file is initially stored in the dedicated data storage unit (see Rose, column 8, lines 56-59, and see column 9, lines 61-65.)

As to claim 10, Cohen as modified teaches the method including the further steps of: storing one or more data files in the dedicated data storage unit after access has been granted (see Cohen, column 2, lines 53-56, and see column 5, lines 40-57); and encrypting the data in the one or more data files in accordance with a user assigned security level associated with each data file to be stored (see Cohen, column 12, lines 38-42.)

As to claim 11, Cohen as modified teaches wherein the step of encrypting the data includes the step of encrypting the data at the secure storage facility prior to storing the one or more data files in the dedicated data storage unit (see Cohen, column 12, lines 35-38, and see column 17, lines 62-65.)

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As to claim 12, Cohen as modified teaches wherein the step of encrypting the data includes the step of encrypting the data at a client computer associated with the request prior to storing the one or more data files in the dedicated data storage unit (see Cohen, column 15, lines 24-28.)

As to claim 17, Cohen teaches a secure storage facility having an address on a communications network (see column 11, lines 46-65) and adapted for communication with other devices on the communications network (see column 12, lines 24-43.)

For the remaining steps of this claim, applicant is kindly directed to remarks and discussions made in claim 1 above.

As to claim 18, Cohen as modified teaches the facility further comprising encryption and decryption means for encrypting and decrypting data files associated with a user identification code in accordance with the set of instructions associated with the user identification code (see Cohen, column 12, lines 39-43.)

As to claim 21, Cohen teaches a secure data storage system (see Abstract), comprising:
a communications network address configured to identify the secure data storage system to a computing device communicatively coupled to the secure data storage system via the communications network (see column 4, lines 23-45);

a dedicated data storage unit configured to maintain data files generated by the computing device (see column 17, lines 1-7); and

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a processing component (see column 4, lines 46-60) configured to receive and process a request to access the dedicated data storage unit (see column 5, lines 4-15), the request specifying the communications network address, the identification code, and a data file maintained with the dedicated data storage unit (see column 11, lines 46-65.)

For the teaching of “the dedicated data storage unit identified by an identification code corresponding to the computing device”, the applicant is directed to the remarks and discussions made in claim 1 above.

As to claims 22 and 30, Cohen as modified teaches wherein the identification code includes a processor identification code corresponding to the computing device (see Rose, column 3, lines 39-47.)

As to claims 23 and 31, Cohen as modified teaches wherein the identification code includes a user identification code and a processor identification code corresponding to the computing device (see Rose, column 5, lines 1-9.)

As to claim 24, Cohen as modified teaches wherein the processing component is further configured to grant access to the dedicated data storage unit in accordance with access instructions associated with the identification code (see Rose, column 3, lines 39-47.)

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As to claim 29, Cohen teaches a method (see column 1, lines 5-10), comprising:

maintaining data files (see column 10, lines 20-25) with a dedicated data storage unit (see column 17, lines 1-7), the dedicated data storage unit having an associated communications network address (see column 11, lines 46-65);

receiving a request to access the dedicated data storage unit the request specifying the communications network address, and a data file maintained with the dedicated data storage unit (see column 13, lines 31-51); and

granting access for the computing device to access the dedicated data storage unit in accordance with access instructions (see column 11, lines 24-32.)

for the teaching of “dedicated data storage unit that is identified by an identification code corresponding to a computing device”, the applicant is directed to the remarks and discussions made in claim 1 above.

4. Claims 6, 19-20, 25, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen (U.S. Patent No. 6,356,941 B1) in view of Rose (U.S. Patent No. 6,314,500 B1), as applied to claims 1-5, 7-12, 17-18, 21-24, and 29-31 above, and further in view of Mooney et al (U.S. Patent No. 6,351,813 B1.)

As to claims 6 and 19, Cohen as modified teaches wherein each data file is stored in the dedicated data storage unit, each data file being encrypted (see Cohen, column 17, lines 62-65.)

Cohen as modified still does not teach wherein each data file has a predetermined security level assigned thereto, each data file being encrypted in accordance with its assigned security level.

Mooney et al teaches an access control/crypto system (see Abstract), in which he teaches wherein each data file has a predetermined security level assigned thereto (see figure 9, and see column 5, lines 16-41, and column 14, lines 63-66), each data file being encrypted in accordance with its assigned security level (see column 17, lines 22-28.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cohen as modified, to include wherein each data file has a predetermined security level assigned thereto, each data file being encrypted in accordance with its assigned security level.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cohen as modified, by the teaching of Mooney et al, because wherein each data file has a predetermined security level assigned thereto, each data file being encrypted in accordance with its assigned security level, enhances the data security by supporting multiple levels of security based on various predetermined user criteria. Assigning a security level to each data file provides a measure of the number of hierarchical steps required to be completed before the user can have access to the file, as taught by Mooney et al (see column 5, lines 16-18.)

As to claim 20, Cohen as modified teaches wherein the set of instructions associated with a user identification code (see Rose, column 3, lines 39-47) specifies read-only, write only or

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read/write access to data files stored in the dedicated data storage unit associated with that user identification code (see Mooney et al, column 15, lines 1-4.)

As to claims 25 and 32, Cohen as modified teaches wherein the processing component is further configured to encrypt the data files in accordance with a security level (see Mooney et al, column 15, lines 1-4) associated with the identification code (see Rose, column 3, lines 39-47.)

5. Claims 13-14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen (U.S. Patent No. 6,356,941 B1) in view of Rose (U.S. Patent No. 6,314,500 B1), as applied to claims 1-5, 7-12, 17-18, 21-24, and 29-31 above, and further in view of Weber (U.S. Patent No. 6,067,618.)

As to claim 13, Cohen teaches in a computer system including at least one client computer coupled by a communications network to a secure storage facility located remotely to the client computer, the remote secure storage facility identified by an address on the communications network and including at least one dedicated data storage unit for storing data files associated with a user identification code in a secure environment, encryption /decryption means and processor means, the remote secure storage facility adapted to allow access to the at least one dedicated data storage unit in accordance with a set of pre-existing instructions, apparatus for accessing the at least one data storage media such that the remote secure storage facility is transparent to a client computer (for these and remaining steps of

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this claim, applicant is kindly directed to the remarks and discussions for modifying Cohen with the teachings of Rose, made in claims 1-5, 7, and 10-12 above.)

Cohen as modified does not teach: a logical data storage peripheral coupled to a client computer, the logical data storage peripheral associated with a remote secure storage facility; and

a controller associated with the logical data storage peripheral and storing the address on the communications network of at least one remote secure storage facility.

Weber teaches a user storage separation system (see Abstract), in which he teaches:

a logical data storage peripheral coupled to a client computer, the logical data storage peripheral associated with a remote secure storage facility (see column 9, lines 41-65, and see column 17, line 65 through column 18, line 4); and

a controller associated with the logical data storage peripheral and storing the address on the communications network of at least one remote secure storage facility (see column 18, lines 5-20.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cohen as modified, to include a logical data storage peripheral coupled to a client computer, the logical data storage peripheral associated with a remote secure storage facility; and a controller associated with the logical data storage peripheral and storing the address on the communications network of at least one remote secure storage facility.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cohen as modified, by the teaching of Weber, because

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including a logical data storage peripheral coupled to a client computer, the logical data storage peripheral associated with a remote secure storage facility; and a controller associated with the logical data storage peripheral and storing the address on the communications network of at least one remote secure storage facility, would provide portability and more control to the user, such as enabling the user to load software programs and store portable files, as taught by Weber (see column 18, lines 9-10.)

As to claim 14, Cohen as modified teaches the apparatus further comprising encryption and decryption means for encrypting data files to be stored in a dedicated data storage unit and decrypting data files retrieved from a dedicated data storage unit (see Cohen, column 12, lines 39-43.)

As to claim 16, Cohen as modified teaches the apparatus further comprising memory means for storing at least one directory, each directory containing a listing of data files stored in a dedicated data storage unit (see Cohen, column 10, lines 52-59.)

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen (U.S. Patent No. 6,356,941 B1) in view of Rose (U.S. Patent No. 6,314,500 B1), and further in view of Weber (U.S. Patent No. 6,067,618), as applied to claims 13-14 and 16 above, and still further in view of Mooney et al (U.S. Patent No. 6,351,813 B1.)

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As to claim 15, Cohen as modified teaches wherein a data file to be stored in the dedicated data storage unit associated with a user identification code (see Rose, column 3, lines 39-47.)

Cohen as modified still does not teach encrypting in accordance with a user assigned security level.

Mooney et al teaches an access control/crypto system (see Abstract), in which he teaches encrypting in accordance with its assigned security level (see column 15, lines 1-4, and see column 17, lines 22-28.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cohen as modified, to include encrypting in accordance with its assigned security level.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cohen as modified, by the teaching of Mooney et al, because encrypting in accordance with its assigned security level would provide assigning a security level to each data file provides a measure of the number of hierarchical steps required to be completed before the user can have access to the file, as taught by Mooney et al (see column 5, lines 16-18.)

7. Claims 26-28 and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen et al (U.S. Patent No. 5,546,557) in view of Rose (U.S. Patent No. 6,314,500 B1.)

As to claim 26, Allen et al teaches a computing device (see column 9, lines 9-16), comprising:

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a logical data storage peripheral (see Abstract and see figure 2, and column 9, lines 34-36) corresponding to a remote secure data storage system that includes a dedicated data storage unit configured to maintain data files generated by the computing device (see Abstract, see figure 12, and see and see column 8, lines 42-45);

a controller configured to receive a request to access the logical data storage peripheral (see column 14, lines 45-50), the request specifying the logical data storage peripheral, and a data file maintained with the dedicated data storage unit (see column 22, lines 21-26); and

the controller further configured to communicatively couple the computing device to the remote secure data storage system and communicate the request to access the logical data storage peripheral to the remote secure data storage system (see column 27, lines 62-65, and see column 28, lines 59-61, and see column 30, lines 41-67.)

Allen et al does not teach the dedicated data storage unit identified by an identification code corresponding to the computing device.

Rose teaches a data processing system (see Abstract), in which he teaches:

the dedicated data storage unit identified by an identification code corresponding to the computing device (see column 3, lines 39-64.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Allen et al to include the dedicated data storage unit identified by an identification code corresponding to the computing device.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Allen et al by the teaching of Rose, because including the dedicated data storage unit identified by an identification code corresponding to the

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computing device, would enable the system to access the appropriate (requested) storage device associated with the user/data for storage and retrieval purposes.

As to claims 27 and 34, Allen et al as modified teaches the device further comprising a processor configured to execute the controller, and wherein the identification code includes a processor identification code corresponding to the computing device (see Rose, column3, lines 39-47.)

As to claims 28 and 35, Allen et al as modified teaches the device further comprising a processor configured to execute the controller (see Allen et al, Abstract, and see column 7, lines 25-42) , and wherein the identification code includes a user identification code and a processor identification code corresponding to the computing device (see Rose, column 3, lines 39-47).

As to claim 33, the applicant is directed to the remarks and discussions made in claim 26 above.

Response to Arguments

8. Applicant's arguments filed on 31-December-2003 with respect to the rejected claims in view of the cited references have been fully considered but they are moot in view of the new grounds for rejection.

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Conclusion

9. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Tony Mahmoudi whose telephone number is (703) 305-4887. The examiner can normally be reached on Mondays-Fridays from 08:00 am to 04:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached at (703) 305-3830.

tm

March 10, 2004


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